SEQUENCE LISTING

<110> De Leys, Robert <120> PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN A PROCESS FOR DETERMINATION OF ANTIBODIES OF BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM <130> 2752-11 <140> 09/576,824 <141> 2000-05-23 <150> 08/723,425 <151> 1996-09-30 <140> 09/146,028 <141> 1993-11-22 <150> PCT/EP93/00517 <151> 1993-03-08 <150> EP 92400598.6 <151> 1992-03-06 <160> 600 <170> PatentIn Ver. 2.1 <210> 1 <211> 11 <212> PRT <213> Human immunodeficiency virus <220> <221> VARIANT <222> (1) <223> modified site <220> <221> VARIANT <222> (11) <223> modified site Xaa Ile Trp Gly Cys Ser Gly Lys Ile Cys Xaa 5

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Arg Pro Asp Tyr Asn Xaa

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Ser Gln Arg Ile Gln Leu Val Asn Thr Xaa 20 25

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Xaa Ala Glu Thr Ile Val Ser Gly Gly Gln Ala Ala Arg Ala Met Ser
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Glu Ala Phe Asp Glu Xaa

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Ala Ser Lys Gln Ala Xaa
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                  5
Lys Ala Leu Gly Leu Gly Ser Gly Val Tyr Leu Leu Pro Arg Arg Gly
                                  25
Xaa
 <210> 109
 <211> 33
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Pro Tyr Ile Glu Gln Ser Gly Pro Val Val His Gly Cys Pro Leu Pro
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Xaa
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<223> modified site : NH2
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Xaa Ile Trp Gly Cys Ser Gly Lys Leu Ile Cys Xaa
<210> 111
<211> 15
<212> PRT
<213> Human immunodeficiency virus
<220>
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<400> 111

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                                     10
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<211> 15
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   Ala Phe Thr Thr Lys Asn Ile Ile Gly Xaa
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                      5
    Phe Lys Gln Lys
                 20
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. . <211> 20
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Pro Asp Tyr Asn
           20
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Pro Gln Arg Lys Thr Lys Arg Asn Thr Asn Arg Arg Pro Gln Asp Val
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Lys Phe Gly
<210> 119
<211> 20
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Gln Ile Val Gly
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<213> Hepatitis C virus
<400> 120
Thr Arg Lys Thr Ser Glu Arg Ser Gln Pro Arg Gly Arg Arg Gln Pro
Ile Pro Lys Val
             20
<210> 121
<211> 20
<212> PRT
<213> Hepatitis C virus
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<400> 121

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Ile Ile Pro Asp Arg Glu Val Leu Tyr Arg Glu Phe Asp Glu Met Glu
                  5
Glu Cys Ser Gln
             20
<210> 122
<211> 20
<212> PRT
<213> Hepatitis C virus
<400> 122
Glu Thr Trp Lys Lys Pro Asp Tyr Glu Pro Pro Val Val His Gly Cys
                                     10
Pro Leu Pro Pro
            20
<210> 123
<211> 21
<212> PRT
<213> Hepatitis C virus
<220>
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<222> (1)
<223> modified site : NH2
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<223> modified site : CONH2
Xaa Met Ser Thr Ile Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr
                                      10
Asn Arg Pro Gln Xaa
            20
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<211> 24
<212> PRT
<213> Hepatitis C virus
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<222> (1)
<223> modified site : NH2
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<222> (23)
<223> modified site : Lys (Bio)
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<222> (24)
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Xaa Met Ser Thr Ile Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr
                                     10
Asn Arg Pro Gln Gly Gly Xaa Xaa
            20
<210> 125
<211> 34
<212> PRT
<213> Hepatitis C virus
<400> 125
Gly Glu Thr Tyr Thr Ser Gly Gly Ala Ala Ser His Thr Thr Ser Thr
                  5
Leu Ala Ser Leu Phe Ser Pro Gly Ala Ser Gln Arg Ile Gln Leu Val
                                  25
Asn Thr
<210> 126
<211> 34
<212> PRT
<213> Hepatitis C virus
<400> 126
Gly His Thr Arg Val Ser Gly Gly Ala Ala Ala Ser Asp Thr Arg Gly
                                                          15
Leu Val Ser Leu Phe Ser Pro Gly Ser Ala Gln Lys Ile Gln Leu Val
             20
Asn Thr
<210> 127
<211> 34
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<212> PRT

<213> Hepatitis C virus

Gly His Thr Arg Val Thr Gly Gly Val Gln Gly His Val Thr Cys Thr

Leu Thr Ser Leu Phe Arg Pro Gly Ala Ser Gln Lys Ile Gln Leu Val 25

Asn Thr

<210> 128

<211> 34

<212> PRT

<213> Hepatitis C virus

Gly His Thr His Val Thr Gly Gly Arg Val Ala Ser Ser Thr Gln Ser 10

Leu Val Ser Trp Leu Ser Gln Gly Pro Ser Gln Lys Ile Gln Leu Val 25

Asn Thr

<210> 129

<211> 34

<212> PRT

<213> Hepatitis C virus

Gly Asp Thr His Val Thr Gly Gly Ala Gln Ala Lys Thr Thr Asn Arg 10 5

Leu Val Ser Met Phe Ala Ser Gly Pro Ser Gln Lys Ile Gln Leu Ile 25

Asn Thr

<210> 130

<211> 34

<212> PRT

<213> Hepatitis C virus

Ala Glu Thr Tyr Thr Ser Gly Gly Asn Ala Gly His Thr Met Thr Gly <400> 130 5

Ile Val Arg Phe Phe Ala Pro Gly Pro Lys Gln Asn Val His Leu Ile 25 20

Asn Thr

<210> 131

<211> 34

<212> PRT

<213> Hepatitis C virus

<400> 131

Ala Glu Thr Ile Val Ser Gly Gly Gln Ala Ala Arg Ala Met Ser Gly

Leu Val Ser Leu Phe Thr Pro Gly Ala Lys Gln Asn Ile Gln Leu Ile 25 20

Asn Thr

<210> 132

<211> 34

<212> PRT

<213> Hepatitis C virus

<400> 132

Ala Glu Thr Tyr Thr Thr Gly Gly Ser Thr Ala Arg Thr Thr Gln Gly

Leu Val Ser Leu Phe Ser Arg Gly Ala Lys Gln Asp Ile Gln Leu Ile 25

Asn Thr

<210> 133

<211> 20

<212> PRT

<213> Hepatitis C virus

Met Ser Thr Ile Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr Asn 10

Arg Arg Pro Gln 20

<210> 134

<211> 15

<212> PRT

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<400> 134
Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr Asn Arg Arg Pro
                  5
<210> 135
<211> 20
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<213> Hepatitis C virus
<400> 135
Arg Asn Thr Asn Arg Arg Pro Gln Asp Val Lys Phe Pro Gly Gly Gly
                                    10
Gln Ile Val Gly
            20
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<211> 32
<212> PRT
<213> Hepatitis C virus
<400> 136
Met Ser Thr Ile Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr Asn
                                     10
                  5
Arg Arg Pro Gln Asp Val Lys Phe Pro Gly Gly Gln Ile Val Gly
<210> 137
<211> 20
<212> PRT
<213> Hepatitis C virus
<400> 137
Val Gly Gly Val Tyr Leu Leu Pro Arg Arg Gly Pro Arg Leu Gly Val
                                                        15
Arg Ala Thr Arg
             20
<210> 138
<211> 20
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<213> Hepatitis C virus

<400> 138 Leu Pro Arg Arg Gly Pro Arg Leu Gly Val Arg Ala Thr Arg Lys Thr 15 Ser Glu Arg Ser <210> 139 <211> 20 <212> PRT <213> Hepatitis C virus Thr Arg Lys Thr Ser Glu Arg Ser Gln Pro Arg Gly Arg Arg Gln Pro Ile Pro Glu Val <210> 140 <211> 20 <212> PRT <213> Hepatitis C virus <400> 140 Arg Ser Gln Pro Arg Gly Arg Arg Gln Pro Ile Pro Glu Val Arg Arg 10 Pro Glu Gly Arg 20 <210> 141 <211> 39 <212> PRT <213> Hepatitis C virus <400> 141 Gly Gly Val Tyr Leu Leu Pro Arg Gly Pro Arg Leu Gly Val Arg 5 Ala Thr Arg Lys Thr Ser Glu Arg Ser Gln Pro Arg Gly Arg Arg Gln

<210> 142 <211> 20

Pro Ile Pro Lys Val Arg Arg

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<212> PRT
<213> Hepatitis C virus
<400> 142
Ser Gln His Leu Pro Tyr Ile Glu Gln Gly Met Met Leu Ala Glu Gln
                                     10
Phe Lys Gln Lys
             20
<210> 143
<211> 20
<212> PRT
<213> Hepatitis C virus
<400> 143
Leu Ala Glu Gln Phe Lys Gln Lys Ala Leu Gly Leu Leu Gln Thr Ala
                                     10
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Ser Arg Gln Ala
<210> 144
<211> 32
<212> PRT
<213> Hepatitis C virus
<400> 144
Ser Gln His Leu Pro Tyr Ile Glu Gln Gly Met Met Leu Ala Glu Gln
Phe Lys Gln Lys Ala Leu Gly Leu Leu Gln Thr Ala Ser Arg Gln Ala
<210> 145
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Arg Arg Phe Ala

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<210> 146
<211> 20
<212> PRT
<213> Hepatitis C virus
<400> 146
Leu Arg Lys Ser Arg Arg Phe Ala Gln Ala Leu Pro Val Trp Ala Arg
                                     10
Pro Asp Tyr Asn
            20
<210> 147
<211> 32
<212> PRT
<213> Hepatitis C virus
<400> 147
Glu Asp Glu Arg Glu Ile Ser Val Pro Ala Glu Ile Leu Arg Lys Ser
                  5
Arg Arg Phe Ala Gln Ala Leu Pro Val Trp Ala Arg Pro Asp Tyr Asn
                                                     . 30
<210> 148
<211> 20
<212> PRT
<213> Hepatitis C virus
<400> 148
Leu Ser Gly Lys Pro Ala Ile Ile Pro Asp Arg Glu Val Leu Tyr Arg
                                                         15
                                     10
                5
Glu Phe Asp Glu
             20
<210> 149
<211> 20
<212> PRT
<213> Hepatitis C virus
<400> 149
Val Asn Gln Arg Ala Val Val Ala Pro Asp Lys Glu Val Leu Tyr Glu
                                                          15
                                    10
                  5
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Ala Phe Asp Glu

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   <211> 20
   <212> PRT
   <213> Hepatitis C virus
   <400> 150
   Ser Gln His Leu Pro Tyr Ile Glu Gln Gly Met Met Leu Ala Glu Gln
                                        10
   Phe Lys Gln Lys
   <210> 151
   <211> 20
   <212> PRT
   <213> Hepatitis C virus
   <400> 151
   Ala Ser Arg Ala Ala Leu Ile Glu Glu Gly Gln Arg Ile Ala Glu Met
             5
    Leu Lys Ser Lys
                20
    <210> 152
    <211> 20
    <212> PRT
    <213> Hepatitis C virus
    Leu Ala Glu Gln Phe Lys Gln Lys Ala Leu Gly Leu Leu Gln Thr Ala
                                        10
    Ser Arg Gln Ala
    <210> 153
    <211> 20
    <212> PRT
    <213> Hepatitis C virus
    <400> 153
    Ile Ala Glu Met Leu Lys Ser Lys Ile Gln Gly Leu Leu Gln Gln Ala
Ser Lys Gln Ala
                 20
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<210> 154
<211> 23
<212> PRT
<213> Human immunodeficiency virus
<400> 154
Asn Asn Thr Arg Lys Ser Ile His Ile Gly Pro Gly Arg Ala Phe Tyr
                  5
Thr Thr Gly Glu Ile Ile Gly
             20
<210> 155
<211> 23
<212> PRT
<213> Human immunodeficiency virus
<400> 155
Asn Asn Thr Arg Lys Ser Ile Tyr Ile Gly Pro Gly Arg Ala Phe His
                                     10
Thr Thr Gly Arg Ile Ile Gly
             20
<210> 156
<211> 23
<212> PRT
<213> Human immunodeficiency virus
<400> 156
Asn Asn Thr Thr Arg Ser Ile His Ile Gly Pro Gly Arg Ala Phe Tyr
                                      10
Ala Thr Gly Asp Ile Ile Gly
              20
 <210> 157
 <211> 23
 <212> PRT
<213> Human immunodeficiency virus
 <400> 157
Tyr Asn Lys Arg Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr
Thr Thr Lys Asn Ile Ile Gly
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<210> 158
<211> 23
<212> PRT
<213> Human immunodeficiency virus
<400> 158
Asn Asn Thr Arg Lys Ser Ile Thr Lys Gly Pro Gly Arg Val Ile Tyr
Ala Thr Gly Gln Ile Ile Gly
             20
<210> 159
<211> 22
<212> PRT
<213> Human immunodeficiency virus
<400> 159
Asn Asn Thr Arg Arg Gly Ile His Phe Gly Pro Gly Gln Ala Leu Tyr
                                      10
Thr Thr Gly Ile Val Gly
             20
<210> 160
<211> 24
<212> PRT
<213> Human immunodeficiency virus
<400> 160
Asn Asn Thr Arg Lys Ser Ile Arg Ile Gln Arg Gly Pro Gly Arg Ala
Phe Val Thr Ile Gly Lys Ile Gly
              20
 <210> 161
<211> 22
 <212> PRT
<213> Human immunodeficiency virus
 <400> 161
Gln Asn Thr Arg Gln Arg Thr Pro Ile Gly Leu Gly Gln Ser Leu Tyr
 Thr Thr Arg Ser Arg Ser
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<210> 162

<211> 21 <212> PRT <213> Human immunodeficiency virus <400> 162 Gln Ile Asp Ile Gln Glu Met Arg Ile Gly Pro Met Ala Trp Tyr Ser 10 Met Gly Ile Gly Gly 20 <210> 163 <211> 23 <212> PRT <213> Human immunodeficiency virus <400> 163 Asn Asn Thr Arg Arg Gly Ile His Met Gly Trp Gly Arg Thr Phe Tyr 10 Ala Thr Gly Glu Ile Ile Gly 20 <210> 164 <211> 22 <212> PRT <213> Human immunodeficiency virus Asn Lys Thr Val Val Pro Ile Thr Leu Met Ser Gly Leu Val Phe His 5 1 Ser Gln Pro Ile Asn Lys 20 <210> 165 <211> 22 <212> PRT <213> Human immunodeficiency virus Asn Lys Thr Val Leu Pro Val Thr Ile Met Ser Gly Leu Val Phe His Ser Gln Pro Ile Asn Asp 20

<210> 166 <211> 25

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   <213> Human T-cell lymphotropic virus
  <220>
  <221> VARIANT
  <222> (1)
  <223> modified site : Bio
<400> 166
  Xaa Gly Gly Val Leu Tyr Ser Pro Asn Val Ser Val Pro Ser Ser Ser
                    5
                                        10
  Ser Thr Leu Leu Tyr Pro Ser Leu Ala
               20
  <210> 167
  <211> 24
  <212> PRT
  <213> Human T-cell lymphotropic virus
  <220>
  <221> VARIANT
  <222> (1)
  <223> modified site : Bio
  <400> 167
  Xaa Gly Gly Tyr Thr Cys Ile Val Cys Ile Asp Arg Ala Ser Leu Ser
                  5
                                      10
  Thr Trp His Val Leu Tyr Ser Pro
               20
  <210> 168
  <211> 25
  <212> PRT
  <213> Human T-cell lymphotropic virus
  <220>
  <221> VARIANT
  <222> (1)
  <223> modified site
  <400> 168
  Xaa Gly Gly Asn Ser Leu Ile Leu Pro Pro Phe Ser Leu Ser Pro Val
                  5
  Pro Thr Leu Gly Ser Arg Ser Arg Arg
               20
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<210> 169 <211> 39

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<212> PRT
<213> Human T-cell lymphotropic virus
<220>
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<222> (1)
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Xaa Gly Gly Asp Ala Pro Gly Tyr Asp Pro Ile Trp Phe Leu Asn Thr
Glu Pro Ser Gln Leu Pro Pro Thr Ala Pro Pro Leu Leu Pro His Ser
                                  25
             20
Asn Leu Asp His Ile Leu Glu
       35
<210> 170
<211> 34
<212> PRT
<213> Human T-cell lymphotropic virus
<220>
<221> VARIANT
<222> (1)
<223> modified site : Bio
<400> 170
Xaa Gly Gly Gln Tyr Ala Ala Gln Asn Arg Arg Gly Leu Asp Leu Leu
Phe Trp Glu Gln Gly Gly Leu Cys Lys Ala Leu Gln Glu Gln Cys Arg
                                  25
Phe Pro
<210> 171
<211> 34
<212> PRT
<213> Human T-cell lymphotropic virus
<220>
<221> VARIANT
<222> (1)
<223> modified site : Bio
<400> 171
Xaa Gly Gly Pro Pro Pro Pro Ser Ser Pro Thr His Asp Pro Pro Asp
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Ser Asp Pro Gln Ile Pro Pro Pro Tyr Val Glu Pro Thr Ala Pro Gln

Val Leu

20

<223> modified site : Bio

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<210> 172
<211> 21
<212> PRT
<213> Human T-cell lymphotropic virus
<220>
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<222> (1)
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<400> 172
Xaa Gly Gly Lys Lys Pro Asn Arg Gln Gly Leu Gly Tyr Tyr Ser Pro
Ser Tyr Asn Asp Pro
             20
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<211> 39
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Xaa Gly Gly Asp Ala Pro Gly Tyr Asp Pro Leu Trp Phe Ile Thr Ser
                                      10
                  5
Glu Pro Thr Gln Pro Pro Pro Thr Ser Pro Pro Leu Val His Asp Ser
                                  25
                                                       30
Asp Leu Glu His Val Leu Thr
         35
<210> 174
<211> 41
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<213> Human T-cell lymphotropic virus
<220>
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<222> (1)
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<400> 174 Xaa Gly Gly Tyr Ser Cys Met Val Cys Val Asp Arg Ser Ser Leu Ser Ser Trp His Val Leu Tyr Thr Pro Asn Ile Ser Ile Pro Gln Gln Thr Ser Ser Arg Thr Ile Leu Phe Pro Ser <210> 175 <211> 33 <212> PRT <213> Human T-cell lymphotropic virus <220> <221> VARIANT <222> (1) <223> modified site : Bio <400> 175 Xaa Gly Gly Pro Thr Thr Pro Pro Pro Pro Pro Pro Pro Pro Ser Pro 10 5 Glu Ala His Val Pro Pro Pro Tyr Val Glu Pro Thr Thr Gln Cys 25 Phe <210> 176 <211> 14 <212> PRT <213> Human immunodeficiency virus <220> <221> VARIANT <222> (1) <223> modified site : Bio <400> 176 Xaa Gly Gly Gly Ile Trp Gly Cys Ser Gly Lys Leu Ile Cys 5 <210> 177 <211> 13 <212> PRT <213> Human immunodeficiency virus

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     <223> modified site : Lys (Bio)
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     Ile Trp Gly Cys Ser Gly Lys Leu Ile Cys Gly Gly Xaa
               5
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     <211> 9
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     <213> Hepatitis C virus
     <400> 178
     Met Ser Thr Ile Pro Lys Pro Gln Arg
      <210> 179
      <211> 9
      <212> PRT
      <213> Hepatitis C virus
      <400> 179
      Ser Thr Ile Pro Lys Pro Gln Arg Lys
      <210> 180
      <211> 9
      <212> PRT
      <213> Hepatitis C virus
      <400> 180
      Thr Ile Pro Lys Pro Gln Arg Lys Thr
      <210> 181
      <211> 9
      <212> PRT
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      <400> 181
      Ile Pro Lys Pro Gln Arg Lys Thr Lys
                      5
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  <210> 182
      <211> 9
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<212> PRT

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<400> 182
Pro Lys Pro Gln Arg Lys Thr Lys Arg
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Lys Pro Gln Arg Lys Thr Lys Arg Asn
<210> 184
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Pro Gln Arg Lys Thr Lys Arg Asn Thr
<210> 185
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Gln Arg Lys Thr Lys Arg Asn Thr Asn
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<400> 186
Arg Lys Thr Lys Arg Asn Thr Asn Arg
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<212> PRT
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<213> Hepatitis C virus

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<400> 187
     Lys Thr Lys Arg Asn Thr Asn Arg Arg
                5
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     <400> 188
     Thr Lys Arg Asn Thr Asn Arg Arg Pro
                      5
     <210> 189
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     <213> Hepatitis C virus
     <400> 189
     Lys Arg Asn Thr Asn Arg Arg Pro Gln
                      5
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      Arg Asn Thr Asn Arg Arg Pro Gln Asp
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      <400> 191
      Asn Thr Asn Arg Arg Pro Gln Asp Val
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Thr Asn Arg Arg Pro Gln Asp Val Lys

<400> 192

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Asn Arg Arg Pro Gln Asp Val Lys Phe
                 5
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Arg Arg Pro Gln Asp Val Lys Phe Pro
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Arg Pro Gln Asp Val Lys Phe Pro Gly
1 5
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Pro Gln Asp Val Lys Phe Pro Gly Gly
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Gln Asp Val Lys Phe Pro Gly Gly Gly
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Asp Val Lys Phe Pro Gly Gly Gln
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Val Lys Phe Pro Gly Gly Gly Gln Ile
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Lys Phe Pro Gly Gly Gly Gln Ile Val
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Phe Pro Gly Gly Gly Gln Ile Val Gly
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Pro Gly Gly Gln Ile Val Gly Gly
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Gly Gly Gln Ile Val Gly Gly Val
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Gly Gly Gln Ile Val Gly Gly Val Tyr
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Gly Gln Ile Val Gly Gly Val Tyr Leu
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Gln Ile Val Gly Gly Val Tyr Leu Leu
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Ile Val Gly Gly Val Tyr Leu Leu Pro
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<210> 208 <211> 9

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Val Gly Gly Val Tyr Leu Leu Pro Arg
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Gly Gly Val Tyr Leu Leu Pro Arg Arg
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Gly Val Tyr Leu Leu Pro Arg Arg Gly
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Val Tyr Leu Leu Pro Arg Arg Gly Pro
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<400> 212
Tyr Leu Leu Pro Arg Arg Gly Pro Arg
<210> 213
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<213> Hepatitis C virus

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Leu Leu Pro Arg Arg Gly Pro Arg Leu
 1 5
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Leu Pro Arg Arg Gly Pro Arg Leu Gly
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Pro Arg Arg Gly Pro Arg Leu Gly Val
                 5
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Arg Arg Gly Pro Arg Leu Gly Val Arg
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Arg Gly Pro Arg Leu Gly Val Arg Ala
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Gly Pro Arg Leu Gly Val Arg Ala Thr
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Pro Arg Leu Gly Val Arg Ala Thr Arg
 1 5
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Arg Leu Gly Val Arg Ala Thr Arg Lys
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Leu Gly Val Arg Ala Thr Arg Lys Thr
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 Gly Val Arg Ala Thr Arg Lys Thr Ser
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 Val Arg Ala Thr Arg Lys Thr Ser Glu
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 Arg Ala Thr Arg Lys Thr Ser Glu Arg
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 Ala Thr Arg Lys Thr Ser Glu Arg Ser
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 Thr Arg Lys Thr Ser Glu Arg Ser Gln
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 Arg Lys Thr Ser Glu Arg Ser Gln Pro
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Lys Thr Ser Glu Arg Ser Gln Pro Arg
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Thr Ser Glu Arg Ser Gln Pro Arg Gly
                 5
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Ser Glu Arg Ser Gln Pro Arg Gly Arg
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Glu Arg Ser Gln Pro Arg Gly Arg Arg
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Arg Ser Gln Pro Arg Gly Arg Arg Gln
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Ser Gln Pro Arg Gly Arg Arg Gln Pro
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Gln Pro Ile Pro Lys Val Arg Arg Pro
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Pro Ile Pro Lys Val Arg Arg Pro Glu
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 Ile Pro Lys Val Arg Arg Pro Glu Gly
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        5
 1
<210> 398
<211> 9
<212> PRT
<213> Hepatitis C virus
<400> 398
Pro Lys Ser Pro Pro Val Pro Pro Pro
 1 5
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<400> 399
Lys Ser Pro Pro Val Pro Pro Pro Arg
            5
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<210> 400
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<212> PRT
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 Ser Pro Pro Val Pro Pro Pro Arg Lys
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<210> 401
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Pro Pro Val Pro Pro Pro Arg Lys Lys
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      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 402
Xaa Met Ser Thr Ile Pro Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr
                  5
Asn Arg Arg Pro Gln Asp Val Lys Phe Pro Gly Gly Gln Ile Val
                                  25
             20
                                                      30
Gly Xaa
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<210> 403 <211> 41

<212> PRT

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Xaa Gly Gly Val Tyr Leu Leu Pro Arg Arg Gly Pro Arg Leu Gly Val
Arg Ala Thr Arg Lys Thr Ser Glu Arg Ser Gln Pro Arg Gly Arg Arg
             20
                                                      30
Gln Pro Ile Pro Lys Val Arg Arg Xaa
         ·35
<210> 404
<211> 34
<212> PRT
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<400> 404
Xaa Ser Gln His Leu Pro Tyr Ile Glu Gln Gly Met Met Leu Ala Glu
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Gln Phe Lys Gln Lys Ala Leu Gly Leu Leu Gln Thr Ala Ser Arg Gln
```

Ala Xaa

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<210> 405
 <211> 34
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 <213> Hepatitis C virus
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      amino acid, OH-group, NH2-group, or a linkage
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Xaa Glu Asp Glu Arg Glu Ile Ser Val Pro Ala Glu Ile Leu Arg Lys
                                      10
Ser Arg Arg Phe Ala Gln Ala Leu Pro Val Trp Ala Arg Pro Asp Tyr
             20
Asn Xaa
<210> 406
<211> 22
<212> PRT
<213> Hepatitis C virus
Gly Glu Thr Tyr Thr Ser Gly Gly Ala Ala Ser His Thr Thr Ser Thr
Leu Ala Ser Leu Phe Ser
             20
<210> 407
<211> 24
<212> PRT
<213> Hepatitis C virus
<400> 407
Ser His Thr Thr Ser Thr Leu Ala Ser Leu Phe Ser Pro Gly Ala Ser
                                    10
Gln Arg Ile Gln Leu Val Asn Thr
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<210> 408
<211> 22
<212> PRT
<213> Hepatitis C virus
<400> 408
Gly His Thr Arg Val Ser Gly Gly Ala Ala Ala Ser Asp Thr Arg Gly
Leu Val Ser Leu Phe Ser
             20
<210> 409
<211> 24
<212> PRT
<213> Hepatitis C virus
<400> 409
Ala Ser Asp Thr Arg Gly Leu Val Ser Leu Phe Ser Pro Gly Ser Ala
                                      10
Gln Lys Ile Gln Leu Val Asn Thr
             20
<210> 410
<211> 22
<212> PRT
<213> Hepatitis C virus
<400> 410
Gly His Thr Arg Val Thr Gly Gly Val Gln Gly His Val Thr Cys Thr
Leu Thr Ser Leu Phe Arg
             20
<210> 411
<211> 24
<212> PRT
<213> Hepatitis C virus
<400> 411
Gly His Val Thr Cys Thr Leu Thr Ser Leu Phe Arg Pro Gly Ala Ser
Gln Lys Ile Gln Leu Val Asn Thr
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<210> 412
<211> 22
<212> PRT
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<400> 412
Gly His Thr His Val Thr Gly Gly Arg Val Ala Ser Ser Thr Gln Ser
                                     10
                5
1
Leu Val Ser Trp Leu Ser
             20
<210> 413
<211> 24
<212> PRT
<213> Hepatitis C virus
<400> 413
Ala Ser Ser Thr Gln Ser Leu Val Ser Trp Leu Ser Gln Gly Pro Ser
                                     10
Gln Lys Ile Gln Leu Val Asn Thr
             20
<210> 414
<211> 22
<212> PRT
<213> Hepatitis C virus
<400> 414
Gly Asp Thr His Val Thr Gly Gly Ala Gln Ala Lys Thr Thr Asn Arg
                                     10
        5
Leu Val Ser Met Phe Ala
             20
<210> 415
<211> 24
<212> PRT
<213> Hepatitis C virus
Ala Lys Thr Thr Asn Arg Leu Val Ser Met Phe Ala Ser Gly Pro Ser
                                     10
Gln Lys Ile Gln Leu Ile Asn Thr
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<210> 416
<211> 22
<212> PRT
<213> Hepatitis C virus
<400> 416
Ala Glu Thr Tyr Thr Ser Gly Gly Asn Ala Gly His Thr Met Thr Gly
                                      10
Ile Val Arg Phe Phe Ala
             20
<210> 417
<211> 24
<212> PRT
<213> Hepatitis C virus
<400> 417
Gly His Thr Met Thr Gly Ile Val Arg Phe Phe Ala Pro Gly Pro Lys
                                      10
Gln Asn Val His Leu Ile Asn Thr
             20
<210> 418
<211> 22
<212> PRT
<213> Hepatitis C virus
<400> 418
Ala Glu Thr Ile Val Ser Gly Gly Gln Ala Ala Arg Ala Met Ser Gly
                                      10
Leu Val Ser Leu Phe Thr
             20
<210> 419
<211> 24
<212> PRT
<213> Hepatitis C virus
<400> 419
Ala Arg Ala Met Ser Gly Leu Val Ser Leu Phe Thr Pro Gly Ala Lys
                                     10
Gln Asn Ile Gln Leu Ile Asn Thr
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<210> 420
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<212> PRT
<213> Hepatitis C virus
<400> 420
Ala Glu Thr Tyr Thr Thr Gly Gly Ser Thr Ala Arg Thr Thr Gln Gly
                                   10
                5
Leu Val Ser Leu Phe Ser
            20
<210> 421
<211> 24
<212> PRT
<213> Hepatitis C virus
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Ala Arg Thr Thr Gln Gly Leu Val Ser Leu Phe Ser Arg Gly Ala Lys
Gln Asp Ile Gln Leu Ile Asn Thr
             20
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<400> 422
Pro Gln Arg Lys Thr Lys
 1
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Lys Thr Lys Arg Asn Thr Asn
 1 5
<210> 424
<211> 7
<212> PRT
<213> Hepatitis C virus
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<400> 424

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Pro Gln Asp Val Lys Phe Pro
1 5
<210> 425
<211> 6
<212> PRT
<213> Hepatitis C virus
<400> 425
Tyr Leu Leu Pro Arg Arg
1
              5
<210> 426
<211> 7
<212> PRT
<213> Hepatitis C virus
<400> 426
Pro Arg Arg Gly Pro Arg Leu
               5
 1
<210> 427
<211> 7
<212> PRT
<213> Hepatitis C virus
<400> 427
Arg Leu Gly Val Arg Ala Thr
 1 5
<210> 428
<211> 7
<212> PRT
<213> Hepatitis C virus
<400> 428
Ser Gln Pro Arg Gly Arg Arg
<210> 429
<211> 7
<212> PRT
<213> Hepatitis C virus
<400> 429
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Arg Arg Gln Pro Ile Pro Lys

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<210> 430
<211> 6
<212> PRT
<213> Hepatitis C virus
<400> 430
Arg Thr Trp Ala Gln Pro
                5
1
<210> 431
<211> 8
<212> PRT
<213> Hepatitis C virus
<400> 431
Gln Pro Gly Tyr Pro Trp Pro Leu
 1
<210> 432
<211> 6
<212> PRT
<213> Hepatitis C virus
<400> 432
Pro Asp Arg Glu Val Leu
1
                5
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<211> 6
<212> PRT
<213> Hepatitis C virus
<400> 433
His Leu Pro Tyr Ile Glu
 1
<210> 434
<211> 8
<212> PRT
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<400> 434
Tyr Ile Glu Gln Gly Met Met Leu
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<210> 435
<211> 7
<212> PRT
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<400> 435
Ala Glu Gln Phe Lys Gln Lys
 1
<210> 436
<211> 6
<212> PRT
<213> Hepatitis C virus
<400> 436
Lys Gln Lys Ala Leu Gly
 1
<210> 437
<211> 7
<212> PRT
<213> Hepatitis C virus
<400> 437
Leu Gly Leu Leu Gln Thr Ala
                 5
1
<210> 438
<211> 7
<212> PRT
<213> Hepatitis C virus
<400> 438
Pro Ala Glu Ile Leu Arg Lys
1
<210> 439
<211> 7
<212> PRT
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Glu Ile Leu Arg Lys Ser Arg
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<210> 440

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<400> 440
Gln Ala Leu Pro Val Trp Ala
       5
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<211> 6
<212> PRT
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<400> 441
Pro Asp Tyr Asn Pro Pro
<210> 442
<211> 7
<212> PRT
<213> Hepatitis C virus
<400> 442
Leu Val Glu Thr Trp Lys Lys
1
<210> 443
<211> 6
<212> PRT
<213> Hepatitis C virus
<400> 443
Asp Tyr Glu Pro Pro Val
1
<210> 444
<211> 5
<212> PRT
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<400> 444
His Gly Cys Pro Leu
 1
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<210> 445 <211> 20 <212> PRT

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Gly Ala Leu Val Ala Phe Lys Ile Met Ser Gly Glu Val Pro Ser Thr
 1
Glu Asp Leu Val
<210> 446
<211> 20
<212> PRT
<213> Hepatitis C virus
<400> 446
Val Pro Ser Thr Glu Asp Leu Val Asn Leu Leu Pro Ala Ile Leu Ser
 1 5 10
Pro Gly Ala Leu
<210> 447
<211> 20
<212> PRT
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<400> 447
Ala Ile Leu Ser Pro Gly Ala Leu Val Val Gly Val Val Cys Ala Ala
                                    10
Ile Leu Arg Arg
<210> 448
<211> 20
<212> PRT
<213> Hepatitis C virus
<400> 448
Val Cys Ala Ala Ile Leu Arg Arg His Val Gly Pro Gly Glu Gly Ala
                                   10
                 5
 1
Val Gln Trp Met
<210> 449
<211> 20
<212> PRT
<213> Hepatitis C virus
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Gly Glu Gly Ala Val Gln Trp Met Asn Arg Leu Ile Ala Phe Ala Ser 10 Arg Gly Asn His <210> 450 <211> 34 <212> PRT <213> Hepatitis C virus Gly Gly Ile Pro Asp Arg Glu Val Leu Tyr Arg Gly Gly Lys Lys Pro 10 Asp Thr Tyr Glu Pro Pro Val Gly Gly Arg Arg Pro Gln Asp Val Lys Phe Pro <210> 451 <211> 33 <212> PRT <213> Hepatitis C virus Gly Gly Trp Ala Arg Pro Asp Tyr Asn Pro Pro Gly Gly Gln Phe Lys 10 Gln Lys Ala Leu Gly Leu Gly Ser Gly Val Tyr Leu Leu Pro Arg Arg 25 Gly <210> 452 <211> 33 <212> PRT <213> Hepatitis C virus Gly Gly Arg Gly Arg Gln Pro Ile Pro Lys Gly Gly Ser Gln His

Leu Pro Tyr Ile Glu Gln Ser Gly Pro Val Val His Gly Cys Pro Leu 20 25 30

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<220>
<221> VARIANT
<222> (36)
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      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
Ala Gly Glu Thr Tyr Thr Ser Gly Gly Ala Ala Ser His Thr Thr Ser
                  5
  1
Thr Leu Ala Ser Leu Phe Ser Pro Gly Ala Ser Gln Arg Ile Gln Leu
                                  25
             2.0
Val Asn Thr Glx
        35
<210> 454
<211> 36
<212> PRT
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<221> VARIANT
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<223> Xaa = modified site : when present, represents an
      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 454
Ala Gly His Thr Arg Val Ser Gly Gly Ala Ala Ala Ser Asp Thr Arg
                                      10
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Gly Leu Val Ser Leu Phe Ser Pro Gly Ser Ala Gln Lys Ile Gln Leu
                                   25
              20
 Val Asn Thr Glx
          35
 <210> 455
 <211> 36
 <212> PRT
 <213> Hepatitis C virus
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       amino acid, OH-group, NH2-group, or a linkage
       involv-ing these two groups
 Ala Gly His Thr Arg Val Thr Gly Gly Val Gln Gly His Val Thr Cys
                                       10
 Thr Leu Thr Ser Leu Phe Arg Pro Gly Ala Ser Gln Lys Ile Gln Leu
                                   25
  Val Asn Thr Glx
           35
  <210> 456
  <211> 36
  <212> PRT
  <213> Hepatitis C virus
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  <223> Xaa = modified site : when present, represents an
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amino acid, OH-group, NH2-group, or a linkage

involv-ing these two groups

Ala Gly His Thr His Val Thr Gly Gly Arg Val Ala Ser Ser Thr Gln Ser Leu Val Ser Trp Leu Ser Gln Gly Pro Ser Gln Lys Ile Gln Leu 25 Val Asn Thr Glx 35 <210> 457 <211> 36 <212> PRT <213> Hepatitis C virus <220> <221> VARIANT <222> (1) <223> Xaa = modified site : when present, represents an amino acid, amino group, or chemically modified amino terminus <220> <221> VARIANT <222> (1) <223> Xaa = modified site : when present, represents an amino acid, OH-group, NH2-group, or a linkage involv-ing these two groups <400> 457 Ala Gly Asp Thr His Val Thr Gly Gly Ala Gln Ala Lys Thr Thr Asn Arg Leu Val Ser Met Phe Ala Ser Gly Pro Ser Gln Lys Ile Gln Leu 25 Ile Asn Thr Glx 35 <210> 458 <211> 36 <212> PRT <213> Hepatitis C virus <220> <221> VARIANT <222> (1)

<223> Xaa = modified site : when present, represents an amino acid, amino group, or chemically modified

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amino terminus

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     <221> VARIANT
     <222> (36)
     <223> Xaa = modified site : when present, represents an
           amino acid, OH-group, NH2-group, or a linkage
           involv-ing these two groups
     Ala Ala Glu Thr Tyr Thr Ser Gly Gly Asn Ala Gly His Thr Met Thr
     <400> 458
     Gly Ile Val Arg Phe Phe Ala Pro Gly Pro Lys Gln Asn Val His Leu
     Ile Asn Thr Glx
              35
      <210> 459
      <211> 36
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      <221> VARIANT
      <222> (36)
      <223> Xaa = modified site : when present, represents an
            amino acid, OH-group, NH2-group, or a linkage
            involv-ing these two groups
      Ala Ala Glu Thr Ile Val Ser Gly Gly Gln Ala Ala Arg Ala Met Ser
      <400> 459
      Gly Leu Val Ser Leu Phe Thr Pro Gly Ala Lys Gln Asn Ile Gln Leu
                                        25
      Ile Asn Thr Glx
               35
       <210> 460
       <211> 36
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10

Thr Leu Ala Ser Leu Phe Ser Glx 20

<210> 462

<211> 26

<212> PRT

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       amino acid, OH-group, NH2-group, or a linkage
       involv-ing these two groups
<400> 462
Ala Ser His Thr Thr Ser Thr Leu Ala Ser Leu Phe Ser Pro Gly Ala
                   5
                                      10
                                                           15
  1
Ser Gln Arg Ile Gln Leu Val Asn Thr Glx
              20
<210> 463
<211> 24
<212> PRT
<213> Hepatitis C virus
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<223> Xaa = modified site : when present, represents an
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<223> Xaa = modified site : when present, represents an
      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
Ala Gly His Thr Arg Val Ser Gly Gly Ala Ala Ala Ser Asp Thr Arg
                                      10
Gly Leu Val Ser Leu Phe Ser Glx
             20
<210> 464
<211> 26
<212> PRT
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<220>

<213> Hepatitis C virus

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<400> 464
Ala Ala Ser Asp Thr Arg Gly Leu Val Ser Leu Phe Ser Pro Gly Ser
Ala Gln Lys Ile Gln Leu Val Asn Thr Glx
             20
<210> 465
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      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 465
Ala Gly His Thr Arg Val Thr Gly Gly Val Gln Gly His Val Thr Cys
                                     10
 1
Thr Leu Thr Ser Leu Phe Arg Glx
             20
<210> 466
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        involv-ing these two groups
  <400> 466
  Ala Gly His Val Thr Cys Thr Leu Thr Ser Leu Phe Arg Pro Gly Ala
   1
                    5
  Ser Gln Lys Ile Gln Leu Val Asn Thr Glx
               20
  <210> 467
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       amino acid, OH-group, NH2-group, or a linkage
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 <400> 467
 Ala Gly His Thr His Val Thr Gly Gly Arg Val Ala Ser Ser Thr Gln
                                      10
 Ser Leu Val Ser Trp Leu Ser Glx
              20
 <210> 468
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 <212> PRT
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           amino acid, OH-group, NH2-group, or a linkage
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     <400> 468
     Ala Ala Ser Ser Thr Gln Ser Leu Val Ser Trp Leu Ser Gln Gly Pro
                                           10
     Ser Gln Lys Ile Gln Leu Val Asn Thr Glx
                  20
     <210> 469
     <211> 24
     <212> PRT
     <213> Hepatitis C virus
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           amino acid, OH-group, NH2-group, or a linkage
           involv-ing these two groups
    <400> 469
    Ala Gly Asp Thr His Val Thr Gly Gly Ala Gln Ala Lys Thr Thr Asn
                       5
                                                               15
    Arg Leu Val Ser Met Phe Ala Glx
                  20
    <210> 470
    <211> 26
    <212> PRT
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amino terminus

amino terminus

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<400> 472
Ala Gly His Thr Met Thr Gly Ile Val Arg Phe Phe Ala Pro Gly Pro
                                     10
Lys Gln Asn Val His Leu Ile Asn Thr Glx
             20
<210> 473
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      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 473
Ala Ala Glu Thr Ile Val Ser Gly Gly Gln Ala Ala Arg Ala Met Ser
                                     10
Gly Leu Val Ser Leu Phe Thr Glx
             20
<210> 474
<211> 26
<212> PRT
<213> Hepatitis C virus
<220>
<221> VARIANT
<222> (1)
<223> Xaa = modified site : when present, represents an
      amino acid, amino group, or chemically modified
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<220>
 <221> VARIANT
 <222> (26)
 <223> Xaa = modified site : when present, represents an
       amino acid, OH-group, NH2-group, or a linkage
       involv-ing these two groups
 Ala Ala Arg Ala Met Ser Gly Leu Val Ser Leu Phe Thr Pro Gly Ala
 Lys Gln Asn Ile Gln Leu Ile Asn Thr Glx
              20
<210> 475
 <211> 24
 <212> PRT
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      amino terminus
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<400> 475
Ala Ala Glu Thr Tyr Thr Thr Gly Gly Ser Thr Ala Arg Thr Thr Gln
                                      10
Gly Leu Val Ser Leu Phe Ser Glx
             20
<210> 476
<211> 26
<212> PRT
<213> Hepatitis C virus
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      amino terminus
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<220>
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      <222> (26)
      <223> Xaa = modified site : when present, represents an
            amino acid, OH-group, NH2-group, or a linkage
            involv-ing these two groups
      <400> 476
      Ala Ala Arg Thr Thr Gln Gly Leu Val Ser Leu Phe Ser Arg Gly Ala
                                           10
                                                               15
      Lys Gln Asp Ile Gln Leu Ile Asn Thr Glx
                  20
     <210> 477
     <211> 11
     <212> PRT
     <213> Hepatitis C virus
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     <222> (11)
     <223> Xaa = modified site : when present, represents an
           amino acid, OH-group, NH2-group, or a linkage
           involv-ing these two groups
     <400> 477
     Ala Ile Pro Lys Pro Gln Arg Lys Thr Lys Glx
                       5
     <210> 478
     <211> 11
     <212> PRT
     <213> Hepatitis C virus
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           amino terminus
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     <223> Xaa = modified site : when present, represents an
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involv-ing these two groups
   <400> 478
   Ala Pro Lys Pro Gln Arg Lys Thr Lys Arg Glx
   <210> 479
   <211> 11
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         amino terminus
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   <222> (11)
   <223> Xaa = modified site : when present, represents an
         amino acid, OH-group, NH2-group, or a linkage
         involv-ing these two groups
   <400> 479
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  <210> 480
  <211> 11
  <212> PRT
  <213> Hepatitis C virus
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  <223> Xaa = modified site : when present, represents an
        amino acid, OH-group, NH2-group, or a linkage
        involv-ing these two groups
<400> 480
  Ala Pro Gln Arg Lys Thr Lys Arg Asn Thr Glx
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amino acid, OH-group, NH2-group, or a linkage

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<210> 481
 <211> 11
 <212> PRT
 <213> Hepatitis C virus
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 <222> (11)
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       amino acid, OH-group, NH2-group, or a linkage
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 <400> 481
 Ala Gln Arg Lys Thr Lys Arg Asn Thr Asn Glx
 <210> 482
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<400> 482
Ala Arg Lys Thr Lys Arg Asn Thr Asn Arg Glx
                  5
  1
<210> 483
<211> 11
<212> PRT
<213> Hepatitis C virus
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 <223> Xaa = modified site : when present, represents an
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 <400> 483
 Ala Lys Thr Lys Arg Asn Thr Asn Arg Arg Glx
                  5
<210> 484
<211> 11
<212> PRT
<213> Hepatitis C virus
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<400> 484
Ala Thr Lys Arg Asn Thr Asn Arg Arg Pro Glx
<210> 485
<211> 11
<212> PRT
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      amino terminus
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<222> (11)
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<400> 485
Ala Arg Arg Pro Gln Asp Val Lys Phe Pro Glx
  1
<210> 486
<211> 11
<212> PRT
<213> Hepatitis C virus
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<222> (11)
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      amino acid, OH-group, NH2-group, or a linkage
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<400> 486
Ala Arg Pro Gln Asp Val Lys Phe Pro Gly Glx
<210> 487
<211> 11
<212> PRT
<213> Hepatitis C virus
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<223> Xaa = modified site : when present, represents an
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      involv-ing these two groups
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<400> 487
Ala Pro Gln Asp Val Lys Phe Pro Gly Gly Glx
                 5
<210> 488
<211> 11
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<213> Hepatitis C virus
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      involv-ing these two groups
<400> 488
Ala Gln Asp Val Lys Phe Pro Gly Gly Glx
                  5
<210> 489
<211> 11
<212> PRT
<213> Hepatitis C virus
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      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 489
Ala Asp Val Lys Phe Pro Gly Gly Gly Gln Glx
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<211> 11
<212> PRT
<213> Hepatitis C virus
<220>
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      amino terminus
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<221> VARIANT
<222> (11)
<223> Xaa = modified site : when present, represents an
      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 490
Ala Gly Gly Val Tyr Leu Leu Pro Arg Arg Glx
                                     10
                  5
<210> 491
<211> 11
<212> PRT
<213> Hepatitis C virus
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<223> Xaa = modified site : when present, represents an
      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 491
Ala Gly Val Tyr Leu Leu Pro Arg Arg Gly Glx
<210> 492
<211> 11
<212> PRT
<213> Hepatitis C virus
<220>
<221> VARIANT
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        amino terminus
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  <223> Xaa = modified site : when present, represents an
        amino acid, OH-group, NH2-group, or a linkage
        involv-ing these two groups
  <400> 492
 Ala Val Tyr Leu Leu Pro Arg Arg Gly Pro Glx
   1
 <210> 493
 <211> 11
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       amino terminus
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 <222> (11)
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       amino acid, OH-group, NH2-group, or a linkage
       involv-ing these two groups
 <400> 493
 Ala Tyr Leu Leu Pro Arg Arg Gly Pro Arg Glx
   1
                   5
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<221> VARIANT <222> (11)

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<223> Xaa = modified site : when present, represents an
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      involv-ing these two groups
Ala Leu Leu Pro Arg Arg Gly Pro Arg Leu Glx
                  5
<210> 495
<211> 11
<212> PRT
<213> Hepatitis C virus
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      amino terminus
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<222> (11)
<223> Xaa = modified site : when present, represents an
     amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 495
Ala Leu Pro Arg Arg Gly Pro Arg Leu Gly Glx
                  5
 1
<210> 496
<211> 11
<212> PRT
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      amino terminus
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<223> Xaa = modified site : when present, represents an
      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 496
Ala Pro Arg Arg Gly Pro Arg Leu Gly Val Glx
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<210> 497
     <211> 11
     <212> PRT
     <213> Hepatitis C virus
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           amino terminus
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     <222> (11)
     <223> Xaa = modified site : when present, represents an
           amino acid, OH-group, NH2-group, or a linkage
           involv-ing these two groups
     <400> 497
     Ala Gly Pro Arg Leu Gly Val Arg Ala Thr Glx
     <210> 498
     <211> 11
     <212> PRT
     <213> Hepatitis C virus
    <220>
    <221> VARIANT
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          amino terminus
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    <222> (11)
    <223> Xaa = modified site : when present, represents an
          amino acid, OH-group, NH2-group, or a linkage
          involv-ing these two groups
    <400> 498
    Ala Pro Arg Leu Gly Val Arg Ala Thr Arg Glx
      1
                       5
                                          10
<210> 499
    <211> 11
    <212> PRT
    <213> Hepatitis C virus
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       amino terminus
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       amino acid, OH-group, NH2-group, or a linkage
       involv-ing these two groups
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 Ala Arg Leu Gly Val Arg Ala Thr Arg Lys Glx
                  5
<210> 500
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<223> Xaa = modified site : when present, represents an
      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 500
Ala Glu Arg Ser Gln Pro Arg Gly Arg Arg Glx
                  5
<210> 501
<211> 11
<212> PRT
<213> Hepatitis C virus
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      amino acid, amino group, or chemically modified
      amino terminus
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 <222> (11)
 <223> Xaa = modified site : when present, represents an
       amino acid, OH-group, NH2-group, or a linkage
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 <400> 501
 Ala Arg Ser Gln Pro Arg Gly Arg Arg Gln Glx
                   5
 <210> 502
 <211> 11
 <212> PRT
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      involv-ing these two groups
<400> 502
Ala Ser Gln Pro Arg Gly Arg Arg Gln Pro Glx
<210> 503
<211> 11
<212> PRT
<213> Hepatitis C virus
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      amino terminus
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<222> (11)
<223> Xaa = modified site : when present, represents an
      amino acid, OH-group, NH2-group, or a linkage
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involv-ing these two groups

(1)

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<400> 503
Ala Arg Gly Arg Arg Gln Pro Ile Pro Lys Glx
                5
<210> 504
<211> 11
<212> PRT
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<221> VARIANT
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<223> Xaa = modified site : when present, represents an
      amino acid, OH-group, NH2-group, or a linkage
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<400> 504
Ala Gly Arg Arg Gln Pro Ile Pro Lys Val Glx
                  5
 1
<210> 505
<211> 11
<212> PRT
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      amino terminus
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<223> Xaa = modified site : when present, represents an
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      involv-ing these two groups
Ala Arg Arg Gln Pro Ile Pro Lys Val Arg Glx
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<210> 506
<211> 11
<212> PRT
<213> Hepatitis C virus
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<223> Xaa = modified site : when present, represents an
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<400> 506
Ala Pro Ile Pro Lys Val Arg Arg Pro Glu Glx
<210> 507
<211> 11
<212> PRT
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 <400> 507
Ala Pro Glu Gly Arg Thr Trp Ala Gln Pro Glx
 <210> 508
 <211> 11
 <212> PRT
<213> Hepatitis C virus
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      involv-ing these two groups
<400> 508
Ala Glu Gly Arg Thr Trp Ala Gln Pro Gly Glx
                  5
 1
<210> 509
<211> 11
<212> PRT
<213> Hepatitis C virus
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       involv-ing these two groups
 <400> 509
 Ala Gly Arg Thr Trp Ala Gln Pro Gly Tyr Glx
   1
 <210> 510
 <211> 11
 <212> PRT
 <213> Hepatitis C virus
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<220>

<221> VARIANT

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 <400> 510
 Ala Arg Thr Trp Ala Gln Pro Gly Tyr Pro Glx
<210> 511
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 <212> PRT
<213> Hepatitis C virus
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<400> 511
Ala Thr Trp Ala Gln Pro Gly Tyr Pro Trp Glx
                  5
                                      10
<210> 512
<211> 11
<212> PRT
<213> Hepatitis C virus
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<223> Xaa = modified site : when present, represents an
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Ala Trp Ala Gln Pro Gly Tyr Pro Trp Pro Glx
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<210> 513
<211> 11
<212> PRT
<213> Hepatitis C virus
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      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 513
Ala Ala Gln Pro Gly Tyr Pro Trp Pro Leu Glx
                  5
<210> 514
<211> 11
<212> PRT
<213> Hepatitis C virus
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      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 514
Ala Gln Pro Gly Tyr Pro Trp Pro Leu Tyr Glx
                   5
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<210> 515 <211> 11 <212> PRT

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<213> Hepatitis C virus
  <220>
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         amino terminus
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   <222> (11)
   <223> Xaa = modified site : when present, represents an
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         involv-ing these two groups
   <400> 515
   Ala Leu Ser Gly Lys Pro Ala Ile Ile Pro Glx
                    5
   <210> 516
   <211> 11
   <212> PRT
   <213> Hepatitis C virus
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         amino terminus
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   <221> VARIANT
   <222> (11)
   <223> Xaa = modified site : when present, represents an
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         involv-ing these two groups
   Ala Gly Lys Pro Ala Ile Ile Pro Asp Arg Glx
                                         10
                     5
   <210> 517
   <211> 11
   <212> PRT
   <213> Hepatitis C virus
<220>
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amino terminus

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<220>
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<222> (11)
<223> Xaa = modified site : when present, represents an
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<400> 517
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  1
<210> 518
<211> 11
<212> PRT
<213> Hepatitis C virus
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      amino terminus
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<223> Xaa = modified site : when present, represents an
      amino acid, OH-group, NH2-group, or a linkage
      involv-ing these two groups
<400> 518
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                  5
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involv-ing these two groups
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involv-ing these two groups

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amino terminus

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amino acid, OH-group, NH2-group, or a linkage

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involv-ing these two groups

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amino terminus

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involv-ing these two groups

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Ala Glu Ile Leu Arg Lys Ser Arg Glx

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Glu Gly Cys Gly
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